THE EFFECTS OF ENVIRONMENTAL ENRICHMENT ON *Phodopus sungorus* (SIBERIAN HAMSTER) IN CAPTIVITY

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This Final Year Project Report entitled **"The Effects of Environmental Enrichment on *Phodopus sungorus* (Siberian Hamsters) In Captivity"** was submitted by Siti Nur Ain bt Abdul Rahim, in partial fulfilment of the requirements for the Degree of Bachelor of Science (Hons.) Biology, in the Faculty of Applied Sciences, and was approved by

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ABSTRACT

THE EFFECTS OF ENVIRONMENTAL ENRICHMENT ON *Phodopus sungorus* (SIBERIAN HAMSTER) IN CAPTIVITY

Numerous species of wild as well as domesticated animals live in captivity across the globe in zoos, circuses, pet mills, livestock breeding facilities, pet shops and even at homes being kept as pets. Captivity in the context of this study means that the animal is in a state of being confined in a cage that is inhibiting the animal from expressing their natural behaviour as they do in their natural habitat ,and the inability to express this behaviour places stress on the animals. Environmental enrichment (EE) however, can be provided to the captive animals to alleviate the stress by giving them the medium to express their natural behaviour. The aim of this study is to observe the effects of EE on the captive animal's weight and mental health. Two different housing conditions are set for two groups of animals. This study is carried out on *Phodopus sungorus* hamsters (Siberian hamsters) for a period of 8 weeks. The result shows that hamsters in the enriched group positively gains weight over the weeks while the hamsters in the non-enriched group negatively loses weight and is supported by the Levene's test which yields a p value of 0.46 that indicates that there is no significant difference between the two variables. This supports the theory that the stress in captivity is may negatively effecting the health of the hamsters. The performance of the non-enriched hamsters on the maze test also deteriorates weekly as compared to the enriched group. Therefore, providing EE are essential to the physical and mental health of captive animals.